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DISCUSSION OF THE AMENDMENT

The specification has been amended to correct a typographical error in Table 1. As filed, the table was missing a row. Support for the amendment appears at page 19, line 36 through page 20, line 7.

Claims 16-61 remain pending in the application.

REMARKS

Applicants thank the Examiner and the Examiner's supervisor for the courtesy extended to Applicants' attorney during the interview held March 8, 2002, in the above-identified application. During the interview, Applicants' attorney explained the presently-claimed invention and why it is patentable over the applied prior art. The discussion is summarized and expanded upon below.

The rejections under 35 U.S.C. §103(a) of Claims 16-24, 30-32 and 35-38 as unpatentable over U.S. Patent No. 5,777,779 (Hashimoto et al), in view of JP 08-083581 (Kiju) alone, and

for Claims 25-26, additionally in view of EP 692,463 (Chartier et al);
for Claims 27-29, additionally in view of WO 97/10185 (Chopin et al);
for Claims 33-34, 39-49 and 55-61, additionally in view of U.S. 5,578,404 (Kliem);
for Claims 50-51, additionally in view of Kliem and Chartier et al; and
for Claims 52-54, additionally in view of Kliem and Chopin et al,

are respectively traversed.

The present invention relates to glazing having electrically controllable optical and/or energy properties. More particularly, as recited in Claim 61, the invention is a glazing comprising (a) at least one electrically controllable system having variable optical and/or

energy properties, (b) at least one coating for adjusting the optical appearance conferred on the said glazing by the said system, said at least one coating having antireflection properties in the visible, wherein said coating having antireflection properties is deposited on at least one of the external faces of said glazing and comprises a stack of thin layers having alternately high and low reflective indices or a graded-refractive-index layer, and (c) at least one coating for attenuating/modifying the color of the glazing in reflection.

When both the antireflection and attenuating/modifying coatings are present, superior results are obtained, which are unobtainable without both layers, or without the antireflection coating. This superiority is demonstrated in the comparative data of record, and particularly, in Examples 3 and 4, described in the specification beginning at page 18, line 37. Better filtering properties toward heat rays, higher TL values in the bleached state (with a TL that can reach 80%, which is a real achievement for an electrochromic glazing, because the electrochromic layers, even in the bleached state, do remain a little bit absorbing). So, the anti-reflecting stack of thin layers acts in synergy with the electrochromic system, thermally and optically, both in the colored and uncolored state of the electrochromic system, which combination of both thermal and optical effects could not have been predicted.

In another embodiment of the present invention, as recited in Claim 39, the above-discussed at least one antireflection coating is present, and the electrically-controllable system is a superposition of functional layers placed on a carrier substrate and provided with a protective film of the inorganic or polymeric layer type, such as in the form of a lacquer or varnish as recited in Claim 40. This embodiment, especially when it is directed to an "all solid" electrochromic system as recited in Claim 59, is superior because this structure is really very "light", very compact, compared to the usual laminated windows or screens, and also because it is optically very advantageous.

The presently-claimed subject matter is neither disclosed nor suggested by the applied prior art. Hashimoto et al is drawn to an electrochromic device. While, as the Examiner finds, Hashimoto et al discloses the presence of an antireflection coating, Hashimoto et al do not disclose a coating for attenuating/modifying the color of the glazing in reflection. The Examiner appears to rely on the disclosure of, *inter alia*, SiO_2 for the first transparent ion conductive layer 5 and the second transparent ion conductive layer 6 (column 4, lines 1-8). However, these layers are internal layers of the electrochromic device of Hashimoto et al. In addition, there is no evidence to support the Examiner's finding that either of layers 5 or 6 function as attenuating/modifying the color of the glazing in reflection.

Kiju discloses a face plate for a CRT, LCD or other displays comprising a high refractive index sub-stratum and a low refractive index super-stratum, as providing good antireflection and antistatic performance.

It is not clear why one skilled in the art would combine Hashimoto et al and Kiju, without the present disclosure as a guide. Hashimoto et al is drawn to electrochromic devices, while Kiju is concerned with displays such as CRT and LCD. The Examiner has provided no evidence to support a holding that one skilled in the art would employ an antireflection coating, disclosed for use with displays of the type mentioned above, as the antireflection coating for an electrochromic device. Moreover, even if one skilled in the art combined Hashimoto et al and Kiju, the result would not be presently-claimed invention since, as discussed above, the presently-recited at least one coating for attenuating/modifying the color of the glazing in reflection is neither disclosed nor suggested. Nor are Hashimoto et al and Kiju related to a glazing. **Submitted herewith** are pages from the Random House Dictionary of the English Language, Second edition, with definitions of "glazing" and "display." These terms are not overlapping.

Nor, in the Final Office Action, does the Examiner address the above-discussed comparative data in support of Claim 16 and claims dependent thereon. The discussion of this comparative data is thus repeated and expanded.

Example 3 is according to the claimed invention; Example 4 contains no antireflection coating. As disclosed in the specification beginning at page 19, line 28, the optical properties of the glazing were improved when at least one coating attenuating the color or an antireflection coating was provided, but the maximum improvement was obtained by using both types of coating together. The following optical properties in the bleached state (+1.2 V supply), and in the colored state (-1.6 V supply) were compared for Examples 3 and 4:

light transmission T_L (%);
values of a_{TL}^* and b_{TL}^* in the (L^*, a^*, b^*) system in transmission;
light reflection R_{L1} on the "internal side" and the corresponding a^* and b^* values;
light reflection R_{L2} on the "external side" and the corresponding a^* and b^* values;
energy transmission T_E (%);
energy reflection R_{E1} (on the external side);
energy reflection R_{E2} (on the internal side), and
solar factor SF (the solar factor is the ratio between the total energy entering the room through the glazing to the incident solar energy).

This data is shown in the specification at (corrected) Table 1 and Table 2 at page 21 (a copy of (corrected) Table 1 and Table 2 appears at the beginning of this amendment), and at page 22, lines 1-8, wherein for Example 3, the SF is 33% in the coloured state (-1.6 V) and 73% in the bleached state (+1.2 V); and for Example 4, the SF is 32% in the coloured state and 67% in the bleached state.

As disclosed in the specification at page 22, lines 9-24:

It may be seen from this data that, in the case of Example 3 according to the invention, it is possible to achieve a wider light transmission range and, in particular, to achieve a T_L of almost 80% in the bleached state. The energy transmission in the bleached state of Example 3 is also lower than that of Example 4 and the energy reflections are higher, whether in the coloured state or in the bleached state. Example 4, which has only the anti-colour coating, already shows an improvement over standard electrochromic glazing, especially with regard to R_{L1} and R_{L2} colorimetry in reflection. But Example 3, in which an antireflection coating has been added, allows the T_L range to be broadened towards higher values and allows the glazing to be made more effective from the standpoint of the filtration of thermal, especially solar, radiation.

Kliem discloses a liquid crystal system for a computer screen, for example, and not a glazing. As shown in Figure 1 and column 14, line 14ff therein, the active layer, i.e., the liquid crystal layer 32, is between two rigid substrates 46, 22: the protective layers 12 and 16 are not protective towards the "active" layer 32, but toward a polarizing layer 14, by sandwiching it.

In the Final Office Action, at page 9, the Examiner finds that "[t]he claims do not speak of the protective layer protecting toward the 'active' layer". In reply, it is understood that the protective film recited in Claim 39 is to protect the functional layers, not simply a layer which happens to be part of the electrically-controllable system (a). This is supported by the disclosure in the specification at page 12, lines 1-5, and indeed, the only reasonable interpretation of Claim 39 when read in light of the above-discussed disclosure is as advanced above.

Since independent Claims 16 and 39 have been demonstrated as patentable over the applied prior art, the dependent claims are necessarily patentable.

For all of the above reasons, it is respectfully requested that the rejections over prior art be withdrawn.

All of the presently pending claims in the application are now believed to be in immediate condition for allowance. Accordingly, Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618

Harris A. Pitlick
Registration No. 38,779



22850

(703) 413-3000
Fax #: (703)413-2220
NFO:HAP:kst

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IN THE SPECIFICATION

Please replace page 21 with the following page:

TABLE 1

EXAMPLE 4

| T_E | | EXAMPLE 4 | | | | R_{E2} | | T_E | | T_E | | EXAMPLE 3 | | R_{E2} | |
|---------|---|-----------|---|------|---|----------|---|-------|---|-------|---|-----------|---|----------|---|
| -1.6 | V | +1.2 | V | -1.6 | V | +1.2 | V | -1.6 | V | +1.2 | V | -1.6 | V | +1.2 | V |
| 14.6 | | 72.0 | | 3.3 | | 9.4 | | 3.4 | | 10.0 | | 16.0 | | 79.9 | |
| a*-2.0 | | -3.0 | | 1.3 | | 6.9 | | -0.4 | | 3.6 | | -2.8 | | -3.3 | |
| b*-23.6 | | 5.7 | | 1.0 | | -3.8 | | 4.6 | | -1.7 | | -23.2 | | 6.4 | |

TABLE 2

EXAMPLE 4

| T_E | | EXAMPLE 4 | | | | R_{E1} | | T_E | | T_E | | EXAMPLE 3 | | R_{E2} | |
|-------|---|-----------|---|------|---|----------|---|-------|---|-------|---|-----------|---|----------|---|
| -1.6 | V | +1.2 | V | -1.6 | V | +1.2 | V | -1.6 | V | +1.2 | V | -1.6 | V | +1.2 | V |
| 10.0 | | 61.2 | | 3.1 | | 9.5 | | 5.4 | | 13.2 | | 10.2 | | 60.2 | |



RESPONSE UNDER 37 CFR 1.116
EXPEDITED PROCEDURE EXAMINING
GROUP 1775

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AF/1775

OBLON
SPIVAK
McCLELLAND
MAIER
&
NEUSTADT
P.C.

Re: Serial No.: 09/486,719
Applicants: Philippe BOIRE et al
Filing Date: August 2, 2000
For: GLAZING WITH OPTICAL AND/OR
ENERGETIC PROPERTIES CAPABLE
OF BEING ELECTRICALLY CONTROLLED
GAU: 1775 Examiner: A. Piziali

ATTORNEYS AT LAW

NORMAN F. OBLON
(703) 413-3000
NOBLON@OBLON.COM

HARRIS A. PITLICK
(703) 413-3000
HPITLICK@OBLON.COM
*BAR OTHER THAN VIRGINIA

SIR:

Attached hereto for filing are the following papers:

AMENDMENT UNDER 37 C.F.R. §1.116 (WITH MARKED-UP COPY)
ATTACHED: PAGES FROM THE RANDOM HOUSE DICTIONARY
OF THE ENGLISH LANGUAGE

Our check in the amount of \$ 0 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. §1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. §1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Norman F. Oblon
Attorney of Record
Registration No.: 24,618

Harris A. Pitlick
Registration No.: 38,779



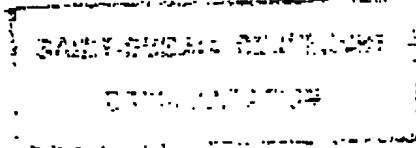
22850

1755 JEFFERSON DAVIS HIGHWAY ■ FOURTH FLOOR ■ ARLINGTON, VIRGINIA 22202 ■ U.S.A.
TELEPHONE: 703-413-3000 ■ FACSIMILE: 703-413-2220 ■ WWW.OBLON.COM

THE
RANDOM HOUSE
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Second Edition

Unabridged



glaz m nt

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glaze-ment (glaz'ment), *n.* a waterproof glaze for a masonry wall. [GLAZE + -MENT]

glaz-er (glaz'ər), *n.* 1. a person who applies a glaze, as to pottery, baked goods, leather, or fur. 2. any mechanical device used to apply a glaze. [1375-1425; late ME glazuer. See GLAZE, -ER]

Glaz-er (glaz'ər), *n.* Nathan, born 1923, U.S. sociologist.

glaz-ier (glaz'ər), *n.* a person who fits windows or the like with glass or panes of glass. [1350-1400; ME glazier. See GLAZE, -ER]

glaz-ier's point, a small, pointed piece of sheet metal, for holding a pane of glass in a sash until the putty has hardened. Also called glaz'ing brad, sprig.

glaz-ier-y (glaz'ərē), *n.* the work of a glazier; glass-work. [1835-45; GLAZIER + -Y]

glaz-ing (glaz'ing), *n.* 1. the act of furnishing or fitting with glass; the business or work of a glazier. 2. panes or sheets of glass set or made to be set in frames, as in windows, doors, or mirrors. 3. the act of applying a glaze. 4. the glassy surface of something glazed. [1325-75; ME; see GLAZE, -ING]

glaz-ing bead, a convex molding nailed against the edge of a pane of glass to hold it in place.

Glaz-ju-nov (glaz'yo nōf', -nōf'; Russ. glaz'yo nōf'), *n.* A-le-xan-drov Kon-stantinovich (al'ëg' zan'dōv, -zān', kon'stān tōf' vich'; Russ. u li kāndr', kān-stup tyē' vich'), 1865-1936, Russian composer. Also, Glaz'zonov.

glib, *Math.* See greatest lower bound.

glid, *guilder*; *guildera*.

gleam (glēm), *n.* 1. a flash or beam of light: the gleam of a lantern in the dark. 2. a dim or subdued light. 3. a brief or slight manifestation or occurrence: traces a gleam of hope. —*v.i.* 4. to send forth a gleam or gleams. 5. to appear suddenly and clearly like a flash of light. [bef. 1000; (n.) ME gleam(e), OE glēm; c. OHG glēmo glowworm; akin to OS glēmo brightness: (v.) ME, deriv. of the n. See GLIMMER, GLIMMER] —gleam/ingly, *adv.* —gleam/less, *adj.*

—*Syn.* 1. GLEAM, GLIMMER, BEAM, RAY are terms for a stream of light. GLEAM denotes a not very brilliant, intermittent or nondirectional stream of light. GLIMMER indicates a nondirectional light that is feeble and unsteady: a faint glimmer of moonlight. BEAM usually means a directional, and therefore smaller, stream: the beam from a searchlight. RAY usually implies a still smaller amount of light than a beam, a single line of light: a ray through a prism in a window shade. 4. SHINE, GLIMMER, FLASH, GLITTER, SPARKLE, BEAM.

gleam-ing (glē'mē), *adj.* gleamier, gleamiest.

gleaming. [1585-95; GLEAM + -ING]

glean (gleān), *v.t.* 1. to gather slowly and laboriously, bit by bit. 2. to gather (grain or the like) after the reapers or regular gatherers. 3. to learn, discover, or find out, usually little by little or slowly. —*v.i.* 4. to collect or gather anything little by little or slowly. 5. to gather what is left by reapers. [1350-1400; ME gleān < OF glener < LL glēnare < [Celtic]] —glean/a-bie, *adj.*

—*Syn.* 3. gather, deduce, infer.

glean-ing (glē'ning), *n.* 1. the act of a person who gleans. 2. gleanings, things found or acquired by gleaming. [1400-50; late ME glēnyng. See GLEAN, -ING]

gle-ba (glē'ba), *n., pl.* base (-bē). Mycol. the sporogenous tissue forming the central part of the sporophore in certain fungi, as in puffballs and stinkhorns. [1840-50; < NL glēba clod; see GLAZE] —gleb/less, *adj.*

glebe (glēb), *n.* 1. Also called glebe land. Chiefly Brit. the cultivable land owned by a parish church or ecclesiastical benefice. 2. Archaic soil; field. [1275-1325; ME < L gleba, glēba clod of earth] —glebe/less, *adj.*

glee¹ (gle), *n.* 1. open delight or pleasure; exultant joy; exultation. 2. an unaccompanied part song for three or more voices, popular esp. in the 16th century. [bef. 900; ME; OE gleō; c. ON glō; akin to CLOW] —*Syn.* 1. merriment, jollity, hilarity, mirth, joviality, gaiety. See mirth.

glee² (gle), *Scot. and North Eng.* —*v.i.* 1. to squint or look with one eye. —*n.* 2. a squint. 3. an imperfect eye, esp. one with a cast. [1260-1300; ME glēn, gleen; perh. < Scand; cf. ON glē to shine] —*Syn.* 1. chorus organized for singing choral music. [1605-15]

gleed (gled), *n.* Archaic, a glowing coal. [bef. 950; ME gleed(e), OE glēd; c. G Gluz, ON glēð, akin to CLOW]

glee-full (gle'fəl), *adj.* full of exultant joy; merry, delighted. [1580-90; GLEE¹ + -FUL] —glee'fully, *adv.* —glee'fulness, *n.*

gleek¹ (glek), *v.t.* Archaic, to make a joke; jest. [1540-50; orig. uncertain]

gleek² (glek), *n.* an English card game for three persons played with a 44-card pack, popular from the 16th through the 18th century. [1525-35; < MF glic, perh. < MD gelic LIKE¹]

glee-man (gle'mān), *n., pl.* men (in medieval times) an itinerant singer, minstrel. [bef. 900; ME; OE glēmān. See GLEE¹, -MAN]

glee-some (gle'som), *adj.* gleeful; merry. [1595-1605; GLEE¹ + -SOME¹] —glee'somely, *adv.* —glee'someness, *n.*

gleet (glet), *n.* 1. Pathol. a. a thin, morbid discharge, as from a wound. b. persistent or chronic gonorrhea. 2. Also called nasal gleet. Vet. Pathol. an inflammation of the nasal passages of a horse, producing a thick discharge. [1300-50; ME glete < MF glète, OF glète < L glutus sticky]

gleety (gle'tē), *adj.* gleeter, gleetiest, *charac-*

ON glægr: c. OE glēm. OS, OHG glau wise; akin to CLOW]

Gleip-nir (glēp'nir), *n.* Scand. Myth. a bond with magic properties, forged by elves, and used by the gods to bind Loki. [c. 'ON, perh. deriv. of gleipa to scorn, smear]

Gleiwitz (glēv'itz), *n.* German name of Gleiwitz.

glei-zation (glē zēzāshən), *n.* Geol. the natural process of producing gray. [1935-40; GLAY + -IZATION]

glei (glei), *n.* a small, narrow, secluded valley. [1480-90; < Ir. Scot. Gael gléann; c. Welsh glyn] —glei/like', *adj.*

Glen (glen), *n.* a male or female given name.

Glen/ Bur'nis (būr'nis), a city in E central Maryland, near Baltimore. 37,263.

Glen/ check'. See Glen plaid. [1920-25] —Glen/ checked'.

Glen/ Cove', a city on NW Long Island, in SE New York. 24,618.

Glen-dale (glēn'dāl'), *n.* 1. a city in SW California, near Los Angeles. 139,060. 2. a city in central Arizona, near Phoenix. 96,388. 3. a town in SE Wisconsin. 13,882.

Glen-dale Heights', a city in NE Illinois. 23,163.

Glen-do-va (glēn dōr'və, -dōr's), *n.* 1. a city in SW California, near Los Angeles. 38,654. 2. a female given name.

Glen-dow-er (glēn dō'ər, glēn dō'ər ər), *n.* Owen, 1339-1416?, Welsh rebel against Henry IV of England.

Glen/ EVlyn (ēv'lin), a city in NE Illinois. 23,649.

glen-gar-ry (glēn gar'ē), *n., pl.* —*ries*, a Scottish cap with straight sides, a crease along the top, and sometimes short ribbon streamers at the back, worn by Highlanders as part of military dress. [1835-45; after Glen-garry, a valley in Invernesshire, Scotland]

gleam/er



9. Music. slur (def. 1): having the character of a vowel, esp. w in more

lyses, r in road and round sound heard d phonemically contiguous between the t of shallow, smoothly t act or instance of glid a smooth metal plate

chair or table, to pac ring of floor surface drawer, shelf, etc. [c. (v.) OE glidian; c. G —

—*Syn.* 1. flow. See

glide-path (glid'pāth), —*path*, —*path* er, —*path* er of spacecraft [1935-40; GLIDE + PA

glide-plane, Cr. space group such that respect to the plane and to the plane bring the [1890-95]

glide (def. 1)

glid-er (glid'ər), *n.* aircraft for gliding for action of gravity or for action of air current upholstered seat suspi links or springs. 3. a person who pilots a glider

—*glide/ slope*, Aero in aircraft or space called glide/ an/gle,

glid-ing bac-to/ris, self-produced slime t inhabiting moist soil waste, and roding brightly colored, fum slime bacteria, myx

glid-ing joint, Arc

glid-ing le/mur, Sc

Glière (glēr), *n.* R mō'ayi tsu vych. 19

glim (glim), *n.* 1. a small portion; scrap.

glim-mer (glim'ər), glim. 2. a dim per faintly or unsteadily; appear faintly or dimly; c. G glimme

—*Syn.* 1. See glim

glim/mer ice, ice depressions in older ice

glim-mor-ing (glim'mor), glimme. 2. —*adj.* 3. shining fa

[1300-50; ME; see GLIMMELY, *adv.*

glimpse (glimps), *n.* a very brief, passing tary or slight appears

Archaic a glim, as o glimpe of. —*v.i.* 6. b. by ex. 7. Archaic t [1350-1400; ME glimme akin to GLIMMER] —*Syn.* 1. spot, spy.

glin (glin), *n., u.* *i.* *glin*

Glin-ka (glēn'kā; Ru vych (ml kā ēl' vīch nā vych), 1803-57, R

glim (glim), *n.* close to the horizon, storm —*v.i.* 2. (of the lighter (often fol by a dial. glim, glynn, glim to GLIMMER, the

glin (glin), *n.* 1. gleaming brightness; tation or occurrence; with a glint. 5. to n cause to glint reflect oba. glint; c. Dan gl brighten

—*Syn.* 1. gleam, glim

glim-ma (glēm'ā), tumor of the brain co NL; see GLIMM, —*ma* —*ma*, *adj.*

glim-mor (glim'mor), *n.* a

preaching of history as a series of dispensations [DISPENSATIONAL + -ISM].

dis/pen/sor, -tor, -n., n. Obs. a person; distributor; administrator. [1350-1400; *ML* *dispensator*, *L*: manager, *dispensa(re)* (see *DISPENSE*) + -tor]

(di spen/sor tɔr/ə, -tɔr/ə), n., pl. -tors. 1. the composition, preparation, and substance are described; a nonofficial dispensary. [1350-1400; < *ML* *dispensatorium* of management, equiv. <*dis-pense*) + -torium -TORY]

ns'), b. -pensed, -pens-ing, n. -v. attribute; to dispense wisdom. 2. to add to the law without bias. 3. Pharm. to imbue (medicine), esp. on prescription to grant dispensation. —u.t. 5.

6. dispense with, a. to do without; with preliminaries. b. to do away with exemption from a law or procedure. [1275-1325; ME *dispensare* to pardon, exempt; *Li* to pay off. to *dis-* *dis-* + *pensare*, freq. of

ion, allot, dole. See *distribute*.

pen/sor), n. 1. a person or thing that contains, package, device, or vending something in small tissue, paper cups, or candy. [1250-1300; *ENSE*, 'ER']

i spen/sor bal), adj. Obs. dispensable. -p'pal, v.t. -pled, -pling. to deprive. [1480-90; *DIS-* + *PEOPLE*] —dis-*dispe-sor*, *dis-* *dispe-sor*, *dis-* *dispe-sor*.

1. spur/mee), adj. Bot. having two + *SPERMATIC*)

spur/mé), n. the fertilization of an animal. Cf. *monosperm*, *poly-* -10; *di-* + *sperm* < Gk *spermia* -disper/mic, adj.

spur/sal), n. dispersion (def. 1). [1815-18]

spur/sant), n. 1. something that disperses. 2. Chem. any admixture to a dispersion that the dispersed particles in suspending as a dispersant. [1940-45; *dis-*

pers/), v. -persed, -pers-ing, adj. 1. send off in various directions; scatter. 2. to spread widely; disseminate. 3. to dispel; cause to vanish.

4. Physical Chem. to separate uniformly throughout a system. 5. Optics to subject (light) to disperse and move apart in different order or regularity; become scattered. 7. to be dispelled; be lost; vanish: The smoke dispersed into

Physical Chem. noting the dispersed system. [1350-1400; ME *dispercen*, *dispercen*] < L *dispersus* (pp. of *disper-* -pi- + *sperg*(-) scatter, srew) + *-er* (of spargere to scatter, srew) + *-er* (of *disper-* eddy (di spür'ədē), adj.

—dis-per-sé-ble (di spür'əbəl), adj. 1. combining, collect.

Chem. any of the class of slightly dispersed in aqueous solution for textile fibers.

spur/shan, -shan), n. 1. Also, *disperser*. an instance of dispersing or of being dispersed. 2. the variation of the index of refraction of a substance, as glass, with the index of refraction increasing, the separation of light into its respective colors, as in a spectrum by a prism. 3. Statistics: values of a variable around the mean or median. 4. *NfL* a scattered pattern of spots under identical conditions or of the same gun with the same firing data.

perse/sys'tem, Physical Chem. a system of particles suspended in a solid, liquid, or gas (def. 1). [1350-1400; ME *dispersi-* *on*- (of *dispersio*), equiv. to *SPERSE* + *-iōn* -ION]

spur/siv), adj. serving or tending to disperse. [1350-1400; *disperse* + *-iōn*] —dis-per-siv-ly, *dis-* *per-* *siv*-ly, *dis-* *per-* *siv*-ness, *n.*

spur/er, Optics. a measure of the ability to disperse light, equal to the quotient of refractive indices of the substance for wavelengths divided by the difference index for an intermediate wave-

Abbe number.

spur/sid), n. Physical Chem. the substance in a dispersion. [1910-15; *disperse* + *-id*]

spur/sid), n. Crystall. bisphenoid.

spur/it), v.t. to deprive of spirit, hope, energy; discourage; dishearten. [1635-1655]

spur/tid), adj. disheartened; dejected; weary.

spur/it, v. < descended or borrowed from: 1. blended; 2. cognate with; cf. compare; derivative; imit. imitative; oblique; 3. re-spelling; spelled: resp. respelling; respelled; origin unknown; 4. unattested; 5. probably all key inside the front cover.

dis-pir/it-ed-ly, adv. —dis-pir/it-ed-ness, *n.*

dis-pit/eous (di pit'ē əs), adj. Archaic. malicious; cruel; pitiless. [1795-1805; earlier *despicio*, after *virtuous* of *despicio*; *despicio*, ME < AF, OF; see *despise*, *-ous*; later taken as *dis-* + *pitious*] —dis-pit/eous-ly, adv. —dis-pit/eous-ness, *n.*

dis-place (di plās'), v.t. -placed, -placing. 1. to compel (a person or persons) to leave home, country, etc. 2. to move or put out of the usual or proper place. 3. to take the place of; replace; supplant. Fiction displaces fact. 4. to remove from a position, office, or dignity. 5. Obs. to rid oneself of. [1345-55; *dis-* + *PLACE*, perh. modeled on MF *desplace*] —dis-place/able, adj.

—Syn. 2. relocate. *DISPLACE*, *MISPLACE* mean to put something in a different place from where it should be. To *DISPLACE* often means to shift something solid and comparatively immovable, more or less permanently from its place: *The flood displaced houses from their foundations*. To *MISPLACE* is to put an object in a wrong place so that it is difficult to find: *Papers belonging in the safe were misplaced and temporarily lost*. 4. depose, oust, dismiss.

displaced (di plāst'), adj. 1. lacking a home, country, etc. 2. moved or put out of the usual or proper place. —n. 3. (used with a plural *u*) persons who lack a home, as through political exile, destruction of their previous shelter, or lack of financial resources (usually preceded by *they*): *After the earthquake, the displaced were temporarily housed in armories*. [1565-75; *DISPLACE* + *-ED*]

displaced/ home/maker, a woman recently divorced, separated, or widowed after many years as a homemaker. [1975-80]

displaced/ per/son, a person driven or expelled from his or her homeland by war, famine, tyranny, etc. Abbrev.: D.P. [1940-45]

dis-place/ment (di plās/mənt), n. 1. the act of displacing. 2. the state of being displaced or the amount or degree to which something is displaced. 3. Physics. a. the displacing in space of one mass by another. b. the weight or the volume of fluid displaced by a floating or submerged body. Cf. *Archimedes' principle*. c. the linear or angular distance in a given direction between a point or point and a reference position. d. the distance of an oscillating body from its central position or point of equilibrium at any given moment. 4. Mach. Auto. a. the volume of the space through which a piston travels during a single stroke in an engine, pump, or the like. b. the total volume of the space traversed by all the pistons. 5. Naut. the amount of water that a vessel displaces, expressed in displacement tons. 6. Geol. the offset of rocks caused by movement along a fault. 7. Psychoanal. the transfer of an emotion from its original focus to another object, person, or situation. 8. See *electric displacement*. [1605-15; *DISPLACE* + *-MENT*]

displace/ment activ/ity, Animal Behav. a behavior performed out of its usual context and apparently irrelevant to the prevailing situation, as eating when an unknown individual approaches, tending to occur when appropriate behaviors, as attacking or fleeing, are in conflict or obstructed. [1945-50]

displace/ment cur/rent, Elect. the rate of change, at any point in space, of electric displacement with time. [1890-95]

displace/ment en/gine. See *reciprocating engine*.

displace/ment hull', Naut. a hull that displaces a significant volume of water when under way. Cf. *planning hull*.

displace/ment ton', Naut. a unit for measuring the displacement of a vessel, equal to a long ton of 2240 lb. (1016 kg) or 35 cu. ft. (1 cu. m) of seawater.

displace/ment ton/nage, Naut. the number of long tons of water displaced by a vessel, light or load displacement being specified.

dis-place/er (di plās'er), n. 1. a person or thing that displaces. 2. plumb (def. 10). [1580-90; *DISPLACE* + *-ER*]

dis-plant (di plānt', -plānt'), v.t. Obs. 1. to dislodge; to transplant. [1485-95; *dis-* + *PLANT*, modeled on MF *desplanter*]

dis-play (di sply'), v.t. 1. to show or exhibit; make visible; to display a sign. 2. to reveal; betray; to display fear. 3. to unfold; open out; spread out; to display a sail. 4. to show ostentatiously; flaunt. 5. Print. to give special prominence to (words, captions, etc.) by choice, size, and arrangement of type. 6. Computers. to output (data) on a CRT or other screen. —u.t. 7. (of animals) to engage in a stereotyped behavior that conveys information to individuals of the same or another species. —n. 8. an act or instance of displaying; exhibition; a display of courage. 9. an ostentatious show: *a vulgar display of wealth*. 10. Print. a. the giving of prominence to particular words, sentences, etc., in an advertisement, headline, or news story. b. printed matter thus displayed. 11. an arrangement of merchandise, art objects, or flowers, designed to please the eye, attract buyers, etc. 12. the visual representation of the output of an electronic device, as the screen of a cathode ray tube. 13. Animal Behav. a pattern of behavior, as posturing, calling, or exposing a color patch, that conveys information to individuals of the same or another species: a threat display. b. an instance of such behavior. [1250-1300; ME *desplayen* < AF, OF *desplieier* < LL *displacere* to unfold. See *dis-*, *PLACERE*] —dis-play'er, *dis-* *play*'er, *dis-* *play*'er.

—Syn. 1, 2. DISPLAY. EVINCE, EXHIBIT. MANIFEST mean to show or bring to the attention of another or others. To *DISPLAY* is literally to spread something out so that it may be most completely and favorably seen: to display goods for sale. To *EXHIBIT* is to display something in a show: to exhibit the best flowers. They may both be used for showing (off) one's qualities or feelings: He displayed his wit. He exhibited great surprise. To *EVINCE* and to *MANIFEST* also mean to show feelings or qualities: to evince or manifest surprise, interest, 4. flourish, parade, air. 5. See *show*. —Ant. 1, 2. conceal.

dis-play/ ad', an advertisement in a newspaper or other publication, often using special attention-getting devices, as large size, display type, and illustrations. [1915-20]

display/ ad'vertising, display ads taken collectively. displayed (di splād'), adj. Heraldry. (of a bird) represented with wings and legs spread; on eagle displayed. [1350-1400; ME; see *DISPLAY*, *-ED*]

display/ type', Print type larger than body type, used in headings, advertisements, etc. Cf. body type. [1860-65]

display/ ad'verse, —u.t. 1. to incur the dissatisfaction, dislike, or disapproval of; offend annoy: His reply displeased the judge. —u.t. 2. to be unpleasant; cause displeasure: *Bad weather displeases*. [1300-50; ME *despleasen* < AF, MF *desplaisir*. See *dis-*, *PLEAS*] —dis-pleas/ing-ly, adv. —dis-pleas/ing-ness, *n.*

dis-pleas/ure (di plēz'ər), n. —u.t. —u.t. 1. dissatisfaction, disapproval, or annoyance. 2. discomfort, uneasiness, or pain. 3. Archaic. a cause of offence, annoyance, or injury. —u.t. 4. Archaic to displease. [1400-50; *DIS-* + *PLEASURE*; *t* late ME *desplaisir* < MF (n. use of inf.) *desplaisir*] —dis-pleas/ure-a-ble, adj. —dis-pleas/ure-a-bly, adv.

—Syn. 1. distaste, dislike; indignation, vexation. See *dissatisfaction*. —Ant. 1. pleasure.

dis-plead (di plād'), v.t. *u.t.* —plod-ed, *plod-ing*. Archaic. to explode. [1660-70; < L *displodere*, equiv. to *dis-* + *plodere*, comb. form of *plaudere* to clap] —dis-plea-sion (di plōshən), *n.*

dis-plume (di plūm'), v.t. *u.t.* —plumed, *plum-ing*. 1. to strip of plumes; depilume. 2. to strip of honors. [1470-80; *dis-* + *PLUME*; cf. *DEPLUME*]

dis-plu-vi-ate (di plōv'ē ət'), adj. (of the atrium of an ancient Roman house) having roofs sloping downward and outward from a central opening. [*L* *displuvius*, equiv. to *dis-* + *pluvius* (rain) + *-iatus*]

dis-port (di spōr', -spōr'), v.t. *u.t.* 1. to divert or amuse (oneself). 2. to display (oneself) in a sportive manner: *The picnickers disported themselves merrily on the beach*. —u.t. 3. to divert oneself: sport. —n. 4. diversion; amusement; play; sport. [1275-1325; (v.) ME *disporten*, *desporten* < AF *desporter*, equiv. to *des-* + *port* *lt.*, to carry (see *PORT*); (n.) ME < AF, deriv. of the v.] —dis-port/ment, *n.*

dis-pos-a-ble (di spō'zə bəl), adj. 1. designed for or capable of being thrown away after being used or used up: disposable plastic spoons; a disposable cigarette lighter. 2. free for use; available: *Every disposable vehicle was sent*. —n. 3. something disposable after a single use, as a paper cup, plate, or napkin. [1645-55; *dispos* + *-ABLE*] —dis-pos'a-bil/ity, dis-pos'a-bil/ness, *n.* —dis-pos'a-bly, adv.

dispos/able in/come. 1. the part of a person's income remaining after deducting personal income taxes. 2. (in nations) income accounting) the total disposable income of all consumers. [1945-50]

dis-pos-ai (di spōz'əl), n. 1. an act or instance of disposing; arrangement: the disposal of the troops. 2. a disposing of or getting rid of something: the disposal of waste material. 3. a disposing or allotting of, as by gift or sale; bestowal or assignment: *She left no will to indicate the disposal of her possessions*. 4. power or right to dispose of a thing; control: left at his disposal. [1620-30; *DISPOSE* + *-AI*]

—Syn. 4. command, direction, management.

dis-pos-ai' (di spōz'əl), n. *u.t.* an electrical device in the drain of a sink, for grinding up garbage to be washed down the drain. Also called disposer. [short for garbage-disposal; see *DISPOSE*]

dis-pose (di spōz'), v.t. —pos-ed, —pos-ing. *n.* —u.t. 1. to give a tendency or inclination to; incline: *His temperament disposed him to argue readily with people*. 2. to put in a particular or the proper order or arrangement; adjust by arranging the parts. 3. to put in a particular or suitable place: *The lamp was disposed on a table nearby*. 4. to make fit or ready; prepare: *Your words of cheer dispose me for the task*. —u.t. 5. to arrange or decide matters to do as God disposes. 6. Obs. to make terms. 7. dispose of, a. to deal with conclusively; settle. b. to get rid of; discard. c. to transfer or give away, as by gift or sale. d. to do away with; destroy. —n. 8. Archaic: disposition; habit. 9. Obs. arrangement; regulation; disposal. [1300-50; ME < MF *disposer*, equiv. to *dis-* + *poser* + *poser* to place (see *POSE*), or the model of L *disposere*] —dis-pos/ing-ly, adv.

dis-posed (di spōz'd), adj. having a certain inclination or disposition; inclined (usually fol. by to or an infinitive): *a man disposed to like others*. [1300-50; ME. See *DISPOSE*, *-ED*] —dis-posed/ly, adv. —dis-posed-ness, *n.*

dis-poser (di spōz'er), n. 1. a person or thing that disposes. 2. *disposal*. [1520-30; *DISPOSE* + *-ER*]

dis-po-si-tion (dis'pō zish'ən), n. 1. the predominant or prevailing tendency of one's spirit; natural mental and emotional outlook or mood; characteristic attitude: a girl with a pleasant disposition. 2. state of mind regarding something; inclination: a disposition to gamble. 3. physical inclination or tendency: the disposition of ice to melt when heated. 4. arrangement or placing, as of troops or buildings. 5. final settlement of a matter. 6. bestowal, as by gift or sale. 7. power to dispose of a thing; control: funds at one's disposition. 8. regulation; management; dispensation: the disposition of God. [1325-75; ME *disposicion* (< AF) < L *disposition-* (a. of *dispositio*), equiv. to *dispositus* (pp. of *disponere* to distribute; dispose) (see *DISPOSE*) + *-iōn*] —dis-posi-tional, adj.

—Syn. 1. nature, character, humor. *DISPOSITION*, *temper*, *TEMPERAMENT* refer to the aspects and habits of mind and emotion that one displays over a length of time. *Disposition* is the natural or prevailing aspect of